5-B-168

LANDSVERK ELECTROMETER COMPANY
641 SONORA AVENUE / GLENDALE 1, CALIFORNIA

F. E. C

E 5,047

ATOMATION, DIVISION OF
LANDSVERK ELECTROMETER COMPANY
641 SONORA AVENUE
GLENDALE 1, CALIFORNIA

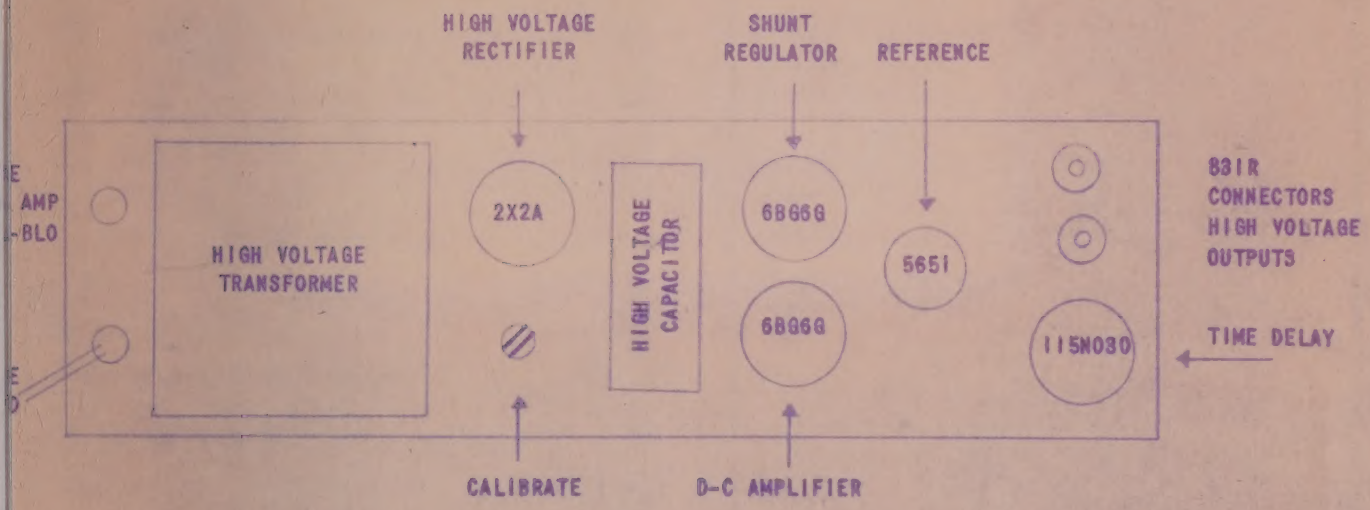
HIGH VOLTAGE POWER SUPPLY
MODEL DV1 OR MODEL DV2

The Model DV1 or DV2 High Voltage Power Supply is an improved instrument for use with proportional counters, flow counters, and BF^3 neutron counters, as well as a source of extremely well regulated high voltage for other applications not requiring more than 1 milliampere. The Models DV1 and DV2 are similar, using the same tube complement and mechanical construction. The main difference is that the Model DV1 provides positive 500 to 2000 volts output and the Model DV2 provides negative 500 to 2000 volts output.

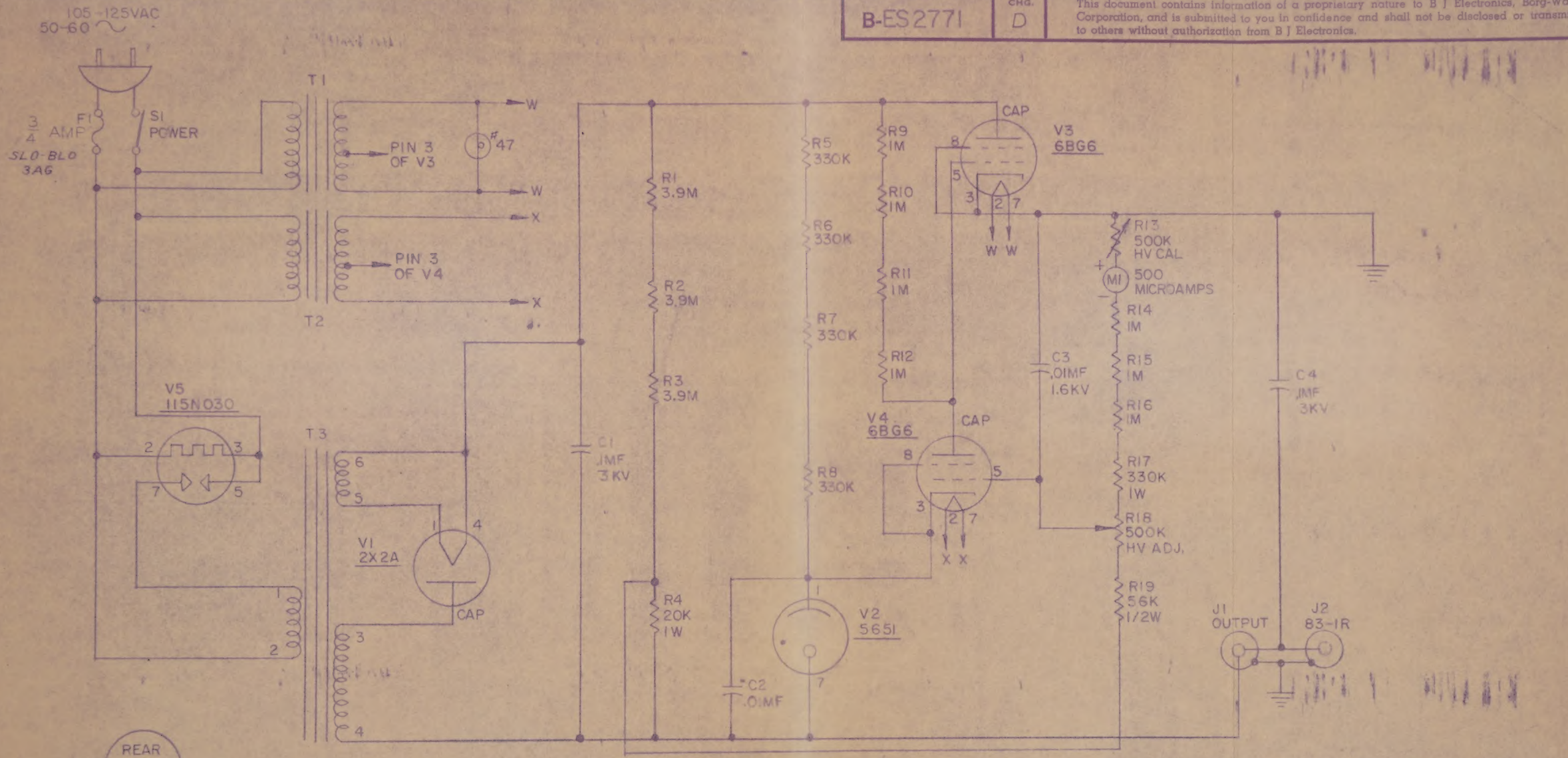
The complete instrument is constructed on a polished chromium chassis and a 5-1/4 in. x 19 in. panel, finished in durable baked enamel. It is normally supplied less cabinet for relay-rack mounting, but the Model DX24 cabinet is available for housing this supply.

The high voltage transformer used is hermetically sealed, providing protection against burnout due to moisture. A special time delay relay is included to provide a 30-second high voltage delay after the unit is first turned on. This is to insure against high voltage surge which might be caused by the high voltage rectifier conducting before the regulating circuit is operating. The high voltage rectifier is a type 2X2A in a half-wave circuit. The high voltage regulator is a shunt type, using a 6BG6G tube driven by a 6BG6G d-c amplifier. A type 5651 gas discharge tube is used to provide the reference voltage to the d-c amplifier. The regulation is such that a 1-percent change in line voltage will cause less than a 0.01-percent change in output voltage. Output voltage drops 0.01 percent from no load to 1 ma. The instrument is designed to operate from a line voltage of 105-125 volts, 50-60 cycles.

The locking-type potentiometer located next to the 2X2A rectifier is used to calibrate the power supply at the factory and may be used for standardization, if necessary when a tube or other component is replaced.



This document contains information of a proprietary nature to B J Electronics, Borg-Warner Corporation, and is submitted to you in confidence and shall not be disclosed or transmitted to others without authorization from B J Electronics.



NOTE:
1. EXCEPT AS NOTED:
   A. ALL RESISTORS ARE 2W.
   B. ALL RESISTORS ARE 5%.

CHG.	DESCRIPTION	E.C.O.	DATE	BY	CHKD.
D	F1 - ADD SLO-BLO 3AG	3281	5-5-59	DWE	WRC
C	F1 WAS 2 AMP	3258	4/23/59	T.F.	PEM
B	C4 WAS .25MF C1 WAS .5 KV	2645	8-6-58	DFD	AT
(R) A	REDRAWN	—	5-20-58	DFD	DJK

MODEL	NEXT ASSY.
DV2	2771

SPECIFICATIONS UNLESS OTHERWISE NOTED

LIMITS ON DIMS	
ANGULAR	
FRACTIONAL	
DECIMAL	

1. ALL DIMENSIONS APPLY BEFORE ADDITIVE FINISH.
2. BREAK ALL SHARP CORNERS .015 MAX.
3. SURFACE ROUGHNESS 63 MICROINCH R.M.S. MAX.
4. DIAMETERS TO BE CONCENTRIC WITHIN .004 T.I.R.
5. FILLET RADIUS .010 MAX. 6. THREADS—CLASS 2.

SCALE — DO NOT SCALE DRAWING — DATE

MAT'L —
FINISH —

DRAWN BY DEBEVEC 5-19-58
CHECKED R. Lawrence 5-22-58
DESIGN APP. [illegible]
PROJ. ENGR. [illegible]

BORG-WARNER CONTROLS
BORG-WARNER CORPORATION
Santa Ana, California

SCHEMATIC, HIGH VOLTAGE SUPPLY NEGATIVE

B-ES2771 — CHG. D